Winter Season Outlook and Possible Effects from La Niña

Overview

During the past several months, La Niña conditions have developed and strengthened in the equatorial Pacific. La Niña conditions are expected to continue through the upcoming winter season, and possibly into the spring months of next year.

La Niña refers to a periodic cooling of ocean surface temperatures in the east-central equatorial Pacific. This typically occurs every 3-5 years or so. During a La Niña (and during El Niño as well), the changes in the Pacific Ocean temperatures affect the patterns of tropical rainfall from Indonesia to the west coast of South America, a distance covering approximately one-half way around the world. These changes in tropical rainfall affect weather patterns throughout the world.

The effects of stronger La Niña events tend to result in warmer and drier than normal conditions during the winter across much of the southern United States, including Texas. For west-central Texas, the Winter Outlook (for December, January, and February) for Temperature and Precipitation, from the Climate Prediction Center, indicates an above normal chance that temperatures will average warmer than normal, and an above normal chance for below normal precipitation.

It should be noted that winter weather (intrusions of cold air and winter precipitation) can still occur in our region when La Niña conditions are present.

Possible Impacts

Possible Development of Drought- If dry conditions persist for an extended period of time, then drought conditions could redevelop in our area.

Increased Fire Weather Concern- If warmer and drier than normal conditions persist, grass and brush will continue lose moisture and become very dry. In addition, the grass and brush across our region experienced abundant growth from the wet spring and summer. These factors, combined with the grass and vegetation becoming dormant through the winter season, would lead to an increased threat for wildfires.

Links with More Information

NOAA Narrative Description of the Winter Outlook for the U.S. http://www.noaanews.noaa.gov/stories2007/20071018_winteroutlook.html

More Detailed Narrative Description of La Niña, from the Climate Prediction Center http://www.cpc.ncep.noaa.gov/products/analysis monitoring/lanina/cold impacts.shtml

The Influence of La Niña on the Winter Outlook, from NOAA http://www.noaanews.noaa.gov/stories2007/20071009_outlook.html